August 23, 2005

Report to:
Bill Merrill
Western Water and Land, Inc.
743 Horizon Ct. Suite 330
Grand Junction, CO 81506

Bill to:
Bill Merrill
Western Water and Land, Inc.
743 Horizon Court, Suite 330
Grand Junction, CO 81506

Project ID:

ACZ Project ID: L52094

Bill Merrill:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 07, 2005. This project has been assigned to ACZ's project number, L52094. Please reference this number in all future inquiries.

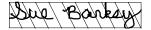
All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L52094. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 23, 2005. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.







Western Water and Land, Inc.

Project ID:

Sample ID: **UP-BKG** ACZ Sample ID: **L52094-01**

05/06/05 11:15 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS		U	*	mg/Kg	0.2	1	07/23/05 1:51	jjr
Arsenic, total (3050)	M6020 ICP-MS	4.7		*	mg/Kg	0.3	1	07/23/05 1:51	jjr
Cadmium, total (3050)	M6020 ICP-MS	0.69		*	mg/Kg	0.06	0.3	07/23/05 1:51	jjr
Chromium, total (3050)	M6010B ICP	11			mg/Kg	1	6	08/04/05 2:39	jjc
Copper, total (3050)	M6010B ICP	9		*	mg/Kg	1	6	08/04/05 2:39	jjc
Iron, total (3050)	M6010B ICP	11200		*	mg/Kg	2	6	08/04/05 23:27	mea
Lead, total (3050)	M6010B ICP	10	В	*	mg/Kg	5	20	08/04/05 2:39	jjc
Manganese, total (3050)	M6010B ICP	509		*	mg/Kg	0.6	3	08/04/05 2:39	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.3	07/27/05 9:52	ak
Molybdenum, total (3050)	M6010B ICP	2	В		mg/Kg	1	6	08/04/05 23:27	mea
Nickel, total (3050)	M6010B ICP	9		*	mg/Kg	1	6	08/04/05 2:39	jjc
Selenium, total (3050)	M6020 ICP-MS		U	*	mg/Kg	0.6	3	07/23/05 1:51	jjr
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 2:39	jjc
Uranium, total (3050)	M6020 ICP-MS	1.33		*	mg/Kg	0.06	0.3	07/23/05 1:51	jjr
Vanadium, total (3050)	M6010B ICP	15.8		*	mg/Kg	0.6	3	08/04/05 2:39	jjc
Zinc, total (3050)	M6010B ICP	31			mg/Kg	1	6	08/04/05 2:39	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	86.1		*	%	0.1	0.5	07/11/05 20:06	as
Soil Preparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 14:50	eds
Digestion - Hot Plate	M3050B ICP							07/14/05 14:50	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 10:05	mtb-as

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-01 ACZ Sample ID: **L52094-02**

05/06/05 13:15 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS		U	*	mg/Kg	0.2	1	07/23/05 2:03	jjr
Arsenic, total (3050)	M6020 ICP-MS	22.2		*	mg/Kg	0.3	1	07/23/05 2:03	jjr
Cadmium, total (3050)	M6020 ICP-MS	1.47		*	mg/Kg	0.05	0.3	07/23/05 2:03	jjr
Chromium, total (3050)	M6010B ICP	12			mg/Kg	1	5	08/04/05 3:03	jjc
Copper, total (3050)	M6010B ICP	6		*	mg/Kg	1	5	08/04/05 3:03	jjc
Iron, total (3050)	M6010B ICP	4960		*	mg/Kg	2	5	08/04/05 23:50	mea
Lead, total (3050)	M6010B ICP	29		*	mg/Kg	4	20	08/04/05 3:03	jjc
Manganese, total (3050)	M6010B ICP	116		*	mg/Kg	0.5	3	08/04/05 3:03	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.04	0.2	07/27/05 9:53	ak
Molybdenum, total (3050)	M6010B ICP		U		mg/Kg	1	5	08/14/05 0:02	jjc
Nickel, total (3050)	M6010B ICP	11		*	mg/Kg	1	5	08/04/05 3:03	jjc
Selenium, total (3050)	M6020 ICP-MS	22.1		*	mg/Kg	0.5	3	07/23/05 2:03	jjr
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:03	jjc
Uranium, total (3050)	M6020 ICP-MS	479		*	mg/Kg	0.3	1	07/27/05 6:41	jag
Vanadium, total (3050)	M6010B ICP	1750		*	mg/Kg	0.5	3	08/04/05 3:03	jjc
Zinc, total (3050)	M6010B ICP	54			mg/Kg	1	5	08/04/05 3:03	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	93.9		*	%	0.1	0.5	07/11/05 20:13	as
Soil Preparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 15:05	eds
Digestion - Hot Plate	M3050B ICP							07/14/05 15:05	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 11:10	mtb-as

Western Water and Land, Inc.

Project ID:

Sample ID: DUP ACZ Sample ID: **L52094-03**

05/06/05 00:00 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS	0.3	В	*	mg/Kg	0.2	1	07/23/05 2:22	jjr
Arsenic, total (3050)	M6020 ICP-MS	25.9		*	mg/Kg	0.3	1	07/23/05 2:22	jjr
Cadmium, total (3050)	M6020 ICP-MS	1.91		*	mg/Kg	0.05	0.3	07/23/05 2:22	jjr
Chromium, total (3050)) M6010B ICP	10			mg/Kg	1	5	08/04/05 3:07	jjc
Copper, total (3050)	M6010B ICP	7		*	mg/Kg	1	5	08/04/05 3:07	jjc
Iron, total (3050)	M6010B ICP	4080		*	mg/Kg	2	5	08/04/05 23:54	mea
Lead, total (3050)	M6010B ICP	32		*	mg/Kg	4	20	08/04/05 3:07	jjc
Manganese, total (3050)	M6010B ICP	115		*	mg/Kg	0.5	3	08/04/05 3:07	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.2	07/27/05 9:55	ak
Molybdenum, total (3050)	M6010B ICP		U		mg/Kg	1	5	08/14/05 0:06	jjc
Nickel, total (3050)	M6010B ICP	11		*	mg/Kg	1	5	08/04/05 3:07	jjc
Selenium, total (3050)	M6020 ICP-MS	12.4		*	mg/Kg	0.5	3	07/23/05 2:22	jjr
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:07	jjc
Uranium, total (3050)	M6020 ICP-MS	436		*	mg/Kg	0.5	3	07/27/05 6:58	jag
Vanadium, total (3050)	M6010B ICP	1720		*	mg/Kg	0.5	3	08/04/05 3:07	jjc
Zinc, total (3050)	M6010B ICP	56			mg/Kg	1	5	08/04/05 3:07	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	94.2		*	%	0.1	0.5	07/11/05 20:20	as
Soil Preparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 15:20	eds
Digestion - Hot Plate	M3050B ICP							07/14/05 15:20	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 12:16	mtb-as

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-02 ACZ Sample ID: **L52094-04**

05/06/05 13:50 Date Sampled:

Date Received: 07/07/05

Metals Analysis								
Parameter	EPA Method	Result	Qual X0	Q Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS	0.2	В *	mg/Kg	0.2	1	07/23/05 2:41	jjr
Arsenic, total (3050)	M6020 ICP-MS	23.7	*	mg/Kg	0.3	1	07/23/05 2:41	jjr
Cadmium, total (3050)	M6020 ICP-MS	1.47	*	mg/Kg	0.05	0.3	07/23/05 2:41	jjr
Chromium, total (3050)	M6010B ICP	10		mg/Kg	1	5	08/04/05 3:11	jjc
Copper, total (3050)	M6010B ICP	7	*	mg/Kg	1	5	08/04/05 3:11	jjc
Iron, total (3050)	M6010B ICP	7180	*	mg/Kg	2	5	08/04/05 23:58	mea
Lead, total (3050)	M6010B ICP	24	*	mg/Kg	4	20	08/04/05 3:11	jjc
Manganese, total (3050)	M6010B ICP	164	*	mg/Kg	0.5	3	08/04/05 3:11	jjc
Mercury, total	M7471A CVAA		UH *	mg/Kg	0.05	0.3	07/27/05 9:58	ak
Molybdenum, total (3050)	M6010B ICP	1	В	mg/Kg	1	5	08/14/05 0:11	jjc
Nickel, total (3050)	M6010B ICP	10	*	mg/Kg	1	5	08/04/05 3:11	jjc
Selenium, total (3050)	M6020 ICP-MS	20.5	*	mg/Kg	0.5	3	07/23/05 2:41	jjr
Silver, total (3050)	M6010B ICP		U *	mg/Kg	1	3	08/04/05 3:11	jjc
Uranium, total (3050)	M6020 ICP-MS	131	*	mg/Kg	0.3	1	07/27/05 7:22	jag
Vanadium, total (3050)	M6010B ICP	506	*	mg/Kg	0.5	3	08/04/05 3:11	jjc
Zinc, total (3050)	M6010B ICP	40		mg/Kg	1	5	08/04/05 3:11	jjc
Soil Analysis								
Parameter	EPA Method	Result	Qual X0	Q Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	94.4	*	%	0.1	0.5	07/11/05 20:26	as
Soil Preparation								
Parameter	EPA Method	Result	Qual X0	Q Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS						07/14/05 15:25	eds
Digestion - Hot Plate	M3050B ICP						07/14/05 15:25	eds
Digestion - Hot Plate	M3050B for Rad Chem						07/14/05 12:49	mtb-as

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-03

ACZ Sample ID: **L52094-05**

Date Sampled: 05/06/05 14:10

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (1312)	M6020 ICP-MS		U		mg/L	0.0004	0.002	07/27/05 1:13	scp
Antimony, total (3050)	M6020 ICP-MS	0.3	В	*	mg/Kg	0.2	1	07/23/05 2:47	jjr
Arsenic (1312)	M6020 ICP-MS	0.0086			mg/L	0.0005	0.003	07/27/05 1:13	scp
Arsenic, total (3050)	M6020 ICP-MS	47.7		*	mg/Kg	0.3	1	07/23/05 2:47	jjr
Cadmium (1312)	M6020 ICP-MS		U		mg/L	0.0001	0.0005	07/27/05 1:13	scp
Cadmium, total (3050)	M6020 ICP-MS	1.15		*	mg/Kg	0.05	0.3	07/23/05 2:47	jjr
Chromium (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 13:50	mea
Chromium, total (3050)	M6010B ICP	9			mg/Kg	1	5	08/04/05 3:15	jjc
Copper (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 13:50	mea
Copper, total (3050)	M6010B ICP	5	В	*	mg/Kg	1	5	08/04/05 3:15	jjc
Iron (1312)	M6010B ICP	0.07		*	mg/L	0.02	0.05	08/08/05 20:00	wfg
Iron, total (3050)	M6010B ICP	6160		*	mg/Kg	2	5	08/05/05 0:02	mea
Lead (1312)	M6010B ICP		U		mg/L	0.04	0.2	07/30/05 13:50	mea
Lead, total (3050)	M6010B ICP	12	В	*	mg/Kg	4	20	08/04/05 3:15	jjc
Manganese (1312)	M6010B ICP		U	*	mg/L	0.005	0.03	07/30/05 13:50	mea
Manganese, total (3050)	M6010B ICP	112		*	mg/Kg	0.5	3	08/04/05 3:15	jjc
Mercury (1312)	M7470A CVAA		UH	*	mg/L	0.0002	0.001	07/24/05 16:30	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.2	07/27/05 10:00	ak
Molybdenum (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 13:50	mea
Molybdenum, total (3050)	M6010B ICP	2	В		mg/Kg	1	5	08/14/05 0:15	jjc
Nickel (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 13:50	mea
Nickel, total (3050)	M6010B ICP	8		*	mg/Kg	1	5	08/04/05 3:15	jjc
Selenium (1312)	M6020 ICP-MS	0.001	В		mg/L	0.001	0.005	07/27/05 1:13	scp
Selenium, total (3050)	M6020 ICP-MS	19.2		*	mg/Kg	0.5	3	07/23/05 2:47	jjr
Silver (1312)	M6020 ICP-MS		U		mg/L	5E-05	0.0003	07/27/05 1:13	scp
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:15	jjc
Uranium (1312)	M6020 ICP-MS	0.0065		*	mg/L	0.0001	0.0005	07/27/05 1:13	scp
Uranium, total (3050)	M6020 ICP-MS	108		*	mg/Kg	0.1	0.5	07/27/05 7:28	jag
Vanadium (1312)	M6010B ICP	0.093			mg/L	0.005	0.03	07/30/05 13:50	mea
Vanadium, total (3050)	M6010B ICP	531		*	mg/Kg	0.5	3	08/04/05 3:15	jjc
Zinc (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 13:50	mea
Zinc, total (3050)	M6010B ICP	29			mg/Kg	1	5	08/04/05 3:15	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	93.6		*	%	0.1	0.5	07/11/05 20:33	as

Western Water and Land, Inc. ACZ Sample ID: **L52094-05**

Project ID: 05/06/05 14:10 Date Sampled:

Sample ID: BFLY-03 Date Received: 07/07/05

Sample Matrix: Soil

Soil Preparation

Controparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP							07/14/05 15:30	eds
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 15:30	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 13:21	mtb-as
Synthetic Precip. Leaching Procedure	M1312			*				07/18/05 10:08	as

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-1 ACZ Sample ID: **L52094-06**

05/06/05 16:50 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS	0.3	В	*	mg/Kg	0.2	1	07/23/05 2:54	jjr
Arsenic, total (3050)	M6020 ICP-MS	67.9		*	mg/Kg	0.3	1	07/23/05 2:54	jjr
Cadmium, total (3050)	M6020 ICP-MS	4.21		*	mg/Kg	0.05	0.3	07/23/05 2:54	jjr
Chromium, total (3050)) M6010B ICP	10			mg/Kg	1	5	08/04/05 3:19	jjc
Copper, total (3050)	M6010B ICP	13		*	mg/Kg	1	5	08/04/05 3:19	jjc
Iron, total (3050)	M6010B ICP	9100		*	mg/Kg	2	5	08/05/05 0:06	mea
Lead, total (3050)	M6010B ICP	30		*	mg/Kg	4	20	08/04/05 3:19	jjc
Manganese, total (3050)	M6010B ICP	181		*	mg/Kg	0.5	3	08/04/05 3:19	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.2	07/27/05 10:01	ak
Molybdenum, total (3050)	M6010B ICP	5			mg/Kg	1	5	08/14/05 0:19	jjc
Nickel, total (3050)	M6010B ICP	12		*	mg/Kg	1	5	08/04/05 3:19	jjc
Selenium, total (3050)	M6020 ICP-MS	36.4		*	mg/Kg	0.5	3	07/23/05 2:54	jjr
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:19	jjc
Uranium, total (3050)	M6020 ICP-MS	411		*	mg/Kg	0.5	3	07/27/05 7:34	jag
Vanadium, total (3050)	M6010B ICP	1200		*	mg/Kg	0.5	3	08/04/05 3:19	jjc
Zinc, total (3050)	M6010B ICP	57			mg/Kg	1	5	08/04/05 3:19	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	96.9		*	%	0.1	0.5	07/11/05 20:40	as
Soil Preparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 15:35	eds
Digestion - Hot Plate	M3050B ICP							07/14/05 15:35	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 13:54	mtb-as

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-2 ACZ Sample ID: **L52094-07**

05/06/05 17:50 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (1312)	M6020 ICP-MS		U		mg/L	0.0004	0.002	07/27/05 1:40	scp
Antimony, total (3050)	M6020 ICP-MS		U	*	mg/Kg	0.2	1	07/23/05 3:00	jjr
Arsenic (1312)	M6020 ICP-MS	0.0066			mg/L	0.0005	0.003	07/27/05 1:40	scp
Arsenic, total (3050)	M6020 ICP-MS	51.4		*	mg/Kg	0.3	1	07/23/05 3:00	jjr
Cadmium (1312)	M6020 ICP-MS		U		mg/L	0.0001	0.0005	07/27/05 1:40	scp
Cadmium, total (3050)	M6020 ICP-MS	0.95		*	mg/Kg	0.05	0.3	07/23/05 3:00	jjr
Chromium (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 14:04	mea
Chromium, total (3050)	M6010B ICP	9			mg/Kg	1	5	08/04/05 3:23	jjc
Copper (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 14:04	mea
Copper, total (3050)	M6010B ICP	6		*	mg/Kg	1	5	08/04/05 3:23	jjc
Iron (1312)	M6010B ICP	0.16		*	mg/L	0.02	0.05	08/08/05 20:15	wfg
Iron, total (3050)	M6010B ICP	6900		*	mg/Kg	2	5	08/05/05 0:10	mea
Lead (1312)	M6010B ICP		U		mg/L	0.04	0.2	07/30/05 14:04	mea
Lead, total (3050)	M6010B ICP	12	В	*	mg/Kg	4	20	08/04/05 3:23	jjc
Manganese (1312)	M6010B ICP	0.005	В	*	mg/L	0.005	0.03	07/30/05 14:04	mea
Manganese, total (3050)	M6010B ICP	200		*	mg/Kg	0.5	3	08/04/05 3:23	jjc
Mercury (1312)	M7470A CVAA		UH	*	mg/L	0.0002	0.001	07/24/05 16:34	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.2	07/27/05 10:02	ak
Molybdenum (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 14:04	mea
Molybdenum, total (3050)	M6010B ICP	2	В		mg/Kg	1	5	08/14/05 0:23	jjc
Nickel (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 14:04	mea
Nickel, total (3050)	M6010B ICP	8		*	mg/Kg	1	5	08/04/05 3:23	jjc
Selenium (1312)	M6020 ICP-MS		U		mg/L	0.001	0.005	07/27/05 1:40	scp
Selenium, total (3050)	M6020 ICP-MS	3.0		*	mg/Kg	0.5	3	07/23/05 3:00	jjr
Silver (1312)	M6020 ICP-MS		U		mg/L	5E-05	0.0003	07/27/05 1:40	scp
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:23	jjc
Uranium (1312)	M6020 ICP-MS	0.0010		*	mg/L	0.0001	0.0005	07/27/05 1:40	scp
Uranium, total (3050)	M6020 ICP-MS	27.40		*	mg/Kg	0.05	0.3	07/23/05 3:00	jjr
Vanadium (1312)	M6010B ICP	0.007	В		mg/L	0.005	0.03	07/30/05 14:04	mea
Vanadium, total (3050)	M6010B ICP	97.4		*	mg/Kg	0.5	3	08/04/05 3:23	jjc
Zinc (1312)	M6010B ICP		U		mg/L	0.01	0.05	07/30/05 14:04	mea
Zinc, total (3050)	M6010B ICP	20			mg/Kg	1	5	08/04/05 3:23	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	92.2		*	%	0.1	0.5	07/11/05 20:46	as

Western Water and Land, Inc. ACZ Sample ID: **L52094-07**

Project ID: 05/06/05 17:50 Date Sampled:

Sample ID: BUR-2 Date Received: 07/07/05

> Sample Matrix: Soil

Soil Preparation

Parameter	EPA Method	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP						07/14/05 15:40	eds
Digestion - Hot Plate	M3050B ICP-MS						07/14/05 15:40	eds
Digestion - Hot Plate	M3050B for Rad Chem						07/14/05 14:27	mtb-as
Synthetic Precip. Leaching Procedure	M1312		*				07/18/05 10:51	as

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-3 ACZ Sample ID: **L52094-08**

05/06/05 18:10 Date Sampled:

Date Received: 07/07/05

Metals Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, total (3050)	M6020 ICP-MS	0.4	В	*	mg/Kg	0.2	1	07/23/05 3:06	jjr
Arsenic, total (3050)	M6020 ICP-MS	104		*	mg/Kg	0.3	1	07/23/05 3:06	jjr
Cadmium, total (3050)	M6020 ICP-MS	5.44		*	mg/Kg	0.05	0.3	07/23/05 3:06	jjr
Chromium, total (3050)	M6010B ICP	12			mg/Kg	1	5	08/04/05 3:27	jjc
Copper, total (3050)	M6010B ICP	17		*	mg/Kg	1	5	08/04/05 3:27	jjc
Iron, total (3050)	M6010B ICP	10000		*	mg/Kg	2	5	08/05/05 0:14	mea
Lead, total (3050)	M6010B ICP	18	В	*	mg/Kg	4	20	08/04/05 3:27	jjc
Manganese, total (3050)	M6010B ICP	234		*	mg/Kg	0.5	3	08/04/05 3:27	jjc
Mercury, total	M7471A CVAA		UH	*	mg/Kg	0.05	0.2	07/27/05 10:03	ak
Molybdenum, total (3050)	M6010B ICP	10			mg/Kg	1	5	08/14/05 0:27	jjc
Nickel, total (3050)	M6010B ICP	14		*	mg/Kg	1	5	08/04/05 3:27	jjc
Selenium, total (3050)	M6020 ICP-MS	14.6		*	mg/Kg	0.5	3	07/23/05 3:06	jjr
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	1	3	08/04/05 3:27	jjc
Uranium, total (3050)	M6020 ICP-MS	129		*	mg/Kg	0.1	0.5	07/27/05 7:39	jag
Vanadium, total (3050)	M6010B ICP	523		*	mg/Kg	0.5	3	08/04/05 3:27	jjc
Zinc, total (3050)	M6010B ICP	41			mg/Kg	1	5	08/04/05 3:27	jjc
Soil Analysis									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	93.7		*	%	0.1	0.5	07/11/05 20:53	as
Soil Preparation									
Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Digestion - Hot Plate	M3050B ICP-MS							07/14/05 15:45	eds
Digestion - Hot Plate	M3050B ICP							07/14/05 15:45	eds
Digestion - Hot Plate	M3050B for Rad Chem							07/14/05 15:00	mtb-as

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Report H	nador	EVID	anatione
Kenorri	5005		เสเเสเเบเเร

Batch A distinct set of samples analyzed at a specific time

Found Value of the QC Type of interest Limit Upper limit for RPD, in %.

Lower Lower Recovery Limit, in % (except for LCSS, mg/Kg)

MDL Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.

PCN/SCN A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis

PQL Practical Quantitation Limit, typically 5 times the MDL.

QC True Value of the Control Sample or the amount added to the Spike

Rec Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)

RPD Relative Percent Difference, calculation used for Duplicate QC Types

Upper Upper Recovery Limit, in % (except for LCSS, mg/Kg)

Sample Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	LCSWD	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	LFB	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	LFM	Laboratory Fortified Matrix
CCV	Continuing Calivation Verification standard	LFMD	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	LRB	Laboratory Reagent Blank
ICB	Initial Calibration Blank	MS	Matrix Spike
ICV	Initial Calibration Verification standard	MSD	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	PBS	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	PBW	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	PQV	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	SDL	Serial Dilution

QC Sample Type Explanations

Blanks Verifies that there is no or minimal contamination in the prep method or calibration procedure.

Control Samples Verifies the accuracy of the method, including the prep procedure.

Duplicates Verifies the precision of the instrument and/or method. Spikes/Fortified Matrix Determines sample matrix interferences, if any.

Standard Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

В	Analyte concentration detected at a value between MDL and PQL.
---	----------------------------------------------------------------

- H Analysis exceeded method hold time. pH is a field test with an immediate hold time.
- R Poor spike recovery accepted because the other spike in the set fell within the given limits.
- T High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
- U Analyte was analyzed for but not detected at the indicated MDL
- V High blank data accepted because sample concentration is 10 times higher than blank concentration
 W Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
- X Quality control sample is out of control.
- Z Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

L52094

ACZ Project ID:

Western Water and Land, Inc.

Project ID:

Antimony (1312) M6020 ICP-MS ACZ ID Analyzed PCN/SCN QC Sample Found Units Rec Lower Upper RPD Limit Type WG193188 WG193188ICV ICV 07/26/05 21:49 MS050510-2 .02004 .02073 mg/L 103.4 90 110 WG193188ICB ICB 07/26/05 21:55 U mg/L -0.0012 0.0012 WG192754PBS PBS 07/27/05 1:07 U -0.0012 0.0012 mg/L .00625 U .00612 L52094-05MS MS 07/27/05 1:27 MS050524-3 mg/L 97.9 75 125 L52094-05MSD MSD 07/27/05 1:33 MS050524-3 .00625 U .00618 98.9 75 125 0.98 20 mg/L L52094-07DUP DUP 07/27/05 2:00 U 0 U 20 mg/L Antimony, total (3050) M6020 ICP-MS ACZ ID Type Analyzed PCN/SCN Found Units WG193036 WG193036ICV ICV 07/22/05 23:49 MS050510-2 .02004 .0204 101.8 90 110 mg/L WG193036ICB ICB 07/22/05 23:55 U mg/L -0.0012 0.0012 WG192639PBS PBS 07/23/05 1:32 U mg/Kg -0.6 0.6 WG192639LCSS LCSS 07/23/05 1:38 PCN22503 105 79.6 mg/Kg 0 234 WG192639LCSSD LCSSD 07/23/05 1:44 PCN22503 105 81 mg/Kg 0 234 1.7 20 L52094-02MS MS 07/23/05 2:10 MS050624-5 .66875 U .42 mg/Kg 62.8 75 125 M2 L52094-02MSD MSD 07/23/05 2:16 MS050624-5 .66875 U 44 mg/Kg 65.8 75 125 4 65 20 M2 Arsenic (1312) M6020 ICP-MS ACZ ID Туре Analyzed PCN/SCN QC Sample Found Units Rec Lower Uppe RPD WG193188 WG193188ICV ICV 07/26/05 21:49 MS050510-2 .05 .05093 mg/L 101.9 90 110 WG193188ICB -0.0015 ICB 07/26/05 21:55 U 0.0015 mg/L WG192754PBS **PBS** 07/27/05 1:07 U -0.0015 0.0015 mg/L L52094-05MS MS 07/27/05 1:27 MS050524-3 .05 .0086 .05483 mg/L 92.5 75 125 L52094-05MSD MSD 07/27/05 1:33 MS050524-3 .05 .0086 .05524 mg/L 93.3 75 125 0.74 20 L52094-07DUP DUP 07/27/05 2:00 .0066 .00676 mg/L 2.4 20 M6020 ICP-MS Arsenic, total (3050) ACZ ID Analyzed PCN/SCN QC Sample Found Units Rec Lowe Uppe RPD Limit Турє WG193036 .05032 WG193036ICV ICV MS050510-2 100.6 07/22/05 23:49 .05 mg/L 90 110 WG193036ICB ICB 07/22/05 23:55 U -0.0015 0.0015 mg/L U WG192639PBS PBS 07/23/05 1:32 -0.9 0.9 mg/Kg WG192639LCSS LCSS 07/23/05 1:38 PCN22503 142 150.6 mg/Kg 113 171

WG192639LCSSD

L52094-02MS

L52094-02MSD

LCSSD

MS

MSD

07/23/05 1:44

07/23/05 2:10

07/23/05 2:16

PCN22503

MS050624-5

MS050624-5

142

5.35

5.35

148.4

22.63

30.98

22.2

22.2

mg/Kg

mg/Kg

mg/Kg

8

164.1

113

75

75

171

125

125

1.5

31.15

20

20

M3

M3 RD

Analyzed

07/26/05 21:49

07/26/05 21:55

07/27/05 1:07

07/27/05 1:27

07/27/05 1:33

07/27/05 2:00

Analyzed

07/22/05 23:49

07/22/05 23:55

07/23/05 1:32

07/23/05 1:38

07/23/05 2:10

07/23/05 2:16

LCSSD 07/23/05 1:44

M6020 ICP-MS

QC

.05

.05

.05

.05

64.5

64.5

5.35

5.35

Sample

U

U

U

Found

.05023

U

U

.04574

.04603

U

.05037

U

.12

69.2

66.75

6.452

6.581

PCN/SCN

MS050510-2

MS050524-3

MS050524-3

PCN/SCN

MS050510-2

PCN22503

PCN22503

MS050624-5

MS050624-5

M6010B ICP

M6020 ICP-MS

Western Water and Land, Inc.

Туре

ICV

ICB

PBS

MS

MSD

DUP

Туре

ICV

ICB

PBS

MS

MSD

LCSS

Project ID:

ACZ ID

WG193188 WG193188ICV

WG193188ICB

WG192754PBS

L52094-05MSD

L52094-07DUP

WG193036 WG193036ICV

WG193036ICB

WG192639PBS

WG192639LCSS

WG192639LCSSD

Chromium (1312)

L52094-02MS

L52094-02MSD

ACZ ID

Cadmium, total (3050)

L52094-05MS

Cadmium (1312)

ACZ Project ID: L52094 Units Rec Lower Upper RPD Limit 100.5 mg/L 90 110 mg/L -0.0003 0.0003 -0.0003 0.0003 mg/L 75 125 mg/L 91.5 mg/L 92.1 75 125 0.63 20 0 20 mg/L Units 100.7 mg/L 90 110 -0.0003 0.0003 mg/L mg/Kg -0.15 0.15 mg/Kg 52.6 76.4 mg/Kg 52.6 76.4 3.6 20 mg/Kg 93.1 75 125 mg/Kg 95.5 75 125 1.98 20

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.962	mg/L	98.1	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.01	0.01			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.01	0.01			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.509	mg/L	101.8	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.515	mg/L	103	75	125	1.17	20	
L52094-07DUP	DUP	07/30/05 14:07			U	0041	mg/L				0	20	

1.47

1.47

Chromium, tota	l (3050)		M6010B I	CP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.923	mg/L	96.2	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	86.5		88.7	mg/Kg		67.9	105			
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	86.5		89.1	mg/Kg		67.9	105	0.4	20	
L52094-01MS	MS	08/04/05 2:47	11050706-3	58	11	70.3	mg/Kg	102.2	75	125			
L52094-01MSD	MSD	08/04/05 2:59	11050706-3	58	11	71.1	mg/Kg	103.6	75	125	1.13	20	

Project ID:

Copper (1312)			M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.957	mg/L	97.9	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.01	0.01			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.01	0.01			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.511	mg/L	102.2	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.513	mg/L	102.6	75	125	0.39	20	
L52094-07DUP	DUP	07/30/05 14:07			U	.0018	mg/L				0	20	
Copper, total (3	050)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.956	mg/L	97.8	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	68.6		68.5	mg/Kg		56.5	80.7			
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	68.6		68.8	mg/Kg		56.5	80.7	0.4	20	
L52094-01MS	MS	08/04/05 2:47	11050706-3	58	9	63.3	mg/Kg	93.6	75	125			
L52094-01MSD	MSD	08/04/05 2:59	11050706-3	58	9	64.3	mg/Kg	95.3	75	125	1.57	20	
Iron (1312)			M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.983	mg/L	99.2	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.02	0.02			
WG193671													
WG193671ICV	ICV	08/08/05 19:36	11050720-1	2		2.022	mg/L	101.1	90	110			
WG193671ICB	ICB	08/08/05 19:40				U	mg/L		-0.02	0.02			
WG192754PBS	PBS	08/08/05 19:56				U	mg/L		-0.02	0.02			
L52094-05MS2	MS	08/08/05 20:07	11050712-2	1	.07	1.073	mg/L	100.3	75	125			
L52094-05MSD2	MSD	08/08/05 20:11	11050712-2	1	.07	1.064	mg/L	99.4	75	125	0.84	20	
L52094-07DUP	DUP	08/08/05 20:19			.16	.29	mg/L				57.8	20	l
Iron, total (3050)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193807													
WG193807ICV	ICV	08/04/05 22:51	11050720-1	2		1.961	mg/L	98.1	90	110			
WG193807ICB	ICB	08/04/05 22:55				U	mg/L		-0.02	0.02			
WG192639PBS	PBS	08/04/05 23:11				U	mg/Kg		-2	2			
WG192639LCSS	LCSS	08/04/05 23:15	PCN22503	13600		15050.4	mg/Kg		7640	19600			
WG192639LCSSD	LCSSD	08/04/05 23:19	PCN22503	13600		14625.6	mg/Kg		7640	19600	2.9	20	
L52094-01MS	MS	08/04/05 23:34	11050706-3	116	11200	12149.5	mg/Kg	818.5	75	125			

Project ID:

Lead (1312)			M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	4		3.89	mg/L	97.3	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.04	0.04			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.04	0.04			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	1	U	1.008	mg/L	100.8	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	1	U	1.035	mg/L	103.5	75	125	2.64	20	
L52094-07DUP	DUP	07/30/05 14:07			U	017	mg/L				0	20	
Lead, total (305	0)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	4		3.746	mg/L	93.7	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.04	0.04			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-4	4			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	93.6		95.6	mg/Kg		75.4	112			
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	93.6		91	mg/Kg		75.4	112	4.9	20	
L52094-01MS	MS	08/04/05 2:47	11050706-3	116	10	111.8	mg/Kg	87.8	75	125			
L52094-01MSD	MSD	08/04/05 2:59	11050706-3	116	10	116.5	mg/Kg	91.8	75	125	4.12	20	
Manganese (131	12)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.9535	mg/L	97.7	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.005	0.005			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.005	0.005			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.5188	mg/L	103.8	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.5156	mg/L	103.1	75	125	0.62	20	
L52094-07DUP	DUP	07/30/05 14:07			.005	.0085	mg/L				51.9	20	F
Manganese, tota	al (3050)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.9121	mg/L	95.6	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.005	0.005			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-0.5	0.5			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	501		512.94	mg/Kg		400	602			
		00/04/05 0.04	DONIOGEGG	F04		E20.06	malka		400	602	1.4	20	
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	501		520.06	mg/Kg		100	002	1.4	20	
WG192639LCSSD L52094-01MS L52094-01MSD	MS MSD	08/04/05 2:31 08/04/05 2:47 08/04/05 2:59	II050706-3	58	509	536.8 594.01	mg/Kg	47.9	75	125	1.4	20	N

Project ID:

Mercury (1312)			M7470A	CVAA									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG192876													
WG192876ICV	ICV	07/24/05 12:16	11050705-6	.02		.01978	mg/L	98.9	90	110			
WG192876ICB	ICB	07/24/05 12:17				U	mg/L		-0.0002	0.0002			
WG193062													
WG193062LCSW	LCSW	07/24/05 16:28	11050721-3	.02		.02061	mg/L	103.1	85	115			
WG192754PBS	PBS	07/24/05 16:29				U	mg/Kg		-0.0002	0.0002			
L52094-05AS	AS	07/24/05 16:32	11050721-6	.005	U	.00511	mg/L	102.2	75	125			
L52094-05ASD	ASD	07/24/05 16:33	11050721-6	.005	U	.00517	mg/L	103.4	75	125	1.17	20	
L52094-07DUP	DUP	07/24/05 16:36			U	U	mg/L				0	20	
Mercury, total			M7471A	CVAA									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qua
WG193166													
WG193166ICV	ICV	07/26/05 9:52	11050715-2	.02		.02014	mg/L	100.7	90	110			
WG193166ICB	ICB	07/26/05 9:53				U	mg/L		-0.0002	0.0002			
WG193257													
WG193257ICV	ICV	07/27/05 9:41	11050715-2	.02		.02024	mg/L	101.2	90	110			
WG193257ICB	ICB	07/27/05 9:42				U	mg/L		-0.0002	0.0002			
WG193257PBS	PBS	07/27/05 9:44				U	mg/Kg		-0.04	0.04			
WG193257LCSS	LCSS	07/27/05 9:45	PCN22503	2.8		2.694	mg/Kg		1.91	3.7			
WG193257LCSSD	LCSSD	07/27/05 9:46	PCN22503	2.8		2.889	mg/Kg		1.91	3.7	7	20	
L52031-02MS	MS	07/27/05 9:48	11050715-5	1.91	.12	2.114	mg/Kg	104.4	85	115			
L52031-02MSD	MSD	07/27/05 9:50	11050715-5	1.8	.12	1.992	mg/Kg	104	85	115	5.94	20	
Molybdenum (1	312)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qua
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.989	mg/L	99.5	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.01	0.01			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.01	0.01			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.517	mg/L	103.4	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.503	mg/L	100.6	75	125	2.75	20	
L52094-07DUP	DUP	07/30/05 14:07			U	.0026	mg/L				0	20	

Project ID:

Molybdenum, to	otal (305	0)	M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qua
WG193807													
WG193807ICV	ICV	08/04/05 22:51	11050720-1	2		2.023	mg/L	101.2	90	110			
WG193807ICB	ICB	08/04/05 22:55				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 23:11				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/04/05 23:15	PCN22503	39		43.2	mg/Kg		30.9	47.1			
WG192639LCSSD	LCSSD	08/04/05 23:19	PCN22503	39		42.8	mg/Kg		30.9	47.1	0.9	20	
L52094-01MS	MS	08/04/05 23:34	11050706-3	58	2	56.5	mg/Kg	94	75	125			
L52094-01MSD	MSD	08/04/05 23:46	11050706-3	58	2	57	mg/Kg	94.8	75	125	0.88	20	
WG194290													
WG194290ICV	ICV	08/13/05 23:03	11050809-3	2		1.968	mg/L	98.4	90	110			
WG194290ICB	ICB	08/13/05 23:08				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/13/05 23:24				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/13/05 23:29	PCN22503	39		42.5	mg/Kg		30.9	47.1			
WG192639LCSSD	LCSSD	08/13/05 23:33	PCN22503	39		43.1	mg/Kg		30.9	47.1	1.4	20	
L52094-01MS	MS	08/13/05 23:45	11050706-3	58	1	57.5	mg/Kg	97.4	75	125			
L52094-01MSD	MSD	08/13/05 23:50	11050706-3	58	1	57.6	mg/Kg	97.6	75	125	0.17	20	
Nickel (1312)			M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qua
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.96	mg/L	98	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.01	0.01			
WG193473							Ü						
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.01	0.01			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.511	mg/L	102.2	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.507	mg/L	101.4	75	125	0.79	20	
L52094-07DUP	DUP	07/30/05 14:07			U	00097	mg/L				0	20	
Nickel, total (30	50)		M6010B	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.888	mg/L	94.4	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-1	1			
MC100630LCCC	LCSS	08/04/05 2:27	PCN22503	68.4		67.6	mg/Kg		55.8	81			
WG 192039LCSS		00/04/05 0:04	PCN22503	68.4		68.7	mg/Kg		55.8	81	1.6	20	
	LCSSD	08/04/05 2:31	1 01122303	00.4		00.7	1119/119			٠.	1.0		
WG192639LCSS WG192639LCSSD L52094-01MS	LCSSD MS	08/04/05 2:31	1050706-3	58	9	61.1	mg/Kg	89.8	75	125	1.0	20	

Project ID:

Selenium (1312)			M6020 IC	P-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193188													
WG193188ICV	ICV	07/26/05 21:49	MS050510-2	.05		.0531	mg/L	106.2	90	110			
WG193188ICB	ICB	07/26/05 21:55				U	mg/L		-0.003	0.003			
WG192754PBS	PBS	07/27/05 1:07				U	mg/L		-0.003	0.003			
L52094-05MS	MS	07/27/05 1:27	MS050524-3	.05	.001	.0445	mg/L	87	75	125			
L52094-05MSD	MSD	07/27/05 1:33	MS050524-3	.05	.001	.0455	mg/L	89	75	125	2.22	20	
L52094-07DUP	DUP	07/27/05 2:00			U	U	mg/L				0	20	
Selenium, total ((3050)		M6020 IC	P-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193036													
WG193036ICV	ICV	07/22/05 23:49	MS050510-2	.05		.0523	mg/L	104.6	90	110			
WG193036ICB	ICB	07/22/05 23:55				U	mg/L		-0.003	0.003			
WG192639PBS	PBS	07/23/05 1:32				U	mg/Kg		-1.5	1.5			
WG192639LCSS	LCSS	07/23/05 1:38	PCN22503	124		127.1	mg/Kg		93.7	154			
WG192639LCSSD	LCSSD	07/23/05 1:44	PCN22503	124		127.5	mg/Kg		93.7	154	0.3	20	
L52094-02MS	MS	07/23/05 2:10	MS050624-5	5.35	22.1	11.29	mg/Kg	-202.1	75	125			N
L52094-02MSD	MSD	07/23/05 2:16	MS050624-5	5.35	22.1	13.36	mg/Kg	-163.4	75	125	16.8	20	N
Silver (1312)			M6020 IC	P-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193188													
WG193188ICV	ICV	07/26/05 21:49	MS050510-2	.02		.01917	mg/L	95.9	90	110			
WG193188ICB	ICB	07/26/05 21:55				U	mg/L		-0.00015	0.00015			
WG192754PBS	PBS	07/27/05 1:07				U	mg/L		-0.00015	0.00015			
L52094-05MS	MS	07/27/05 1:27	MS050524-3	.0125	U	.01164	mg/L	93.1	75	125			
L52094-05MSD	MSD	07/27/05 1:33	MS050524-3	.0125	U	.01172	mg/L	93.8	75	125	0.68	20	
L52094-07DUP	DUP	07/27/05 2:00			U	U	mg/L				0	20	
Silver, total (305	0)		M6010B I	CP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	1		.939	mg/L	93.9	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	171		178.5	mg/Kg		105	237			
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	171		183.2	mg/Kg		105	237	2.6	20	
L52094-01MS	MS	08/04/05 2:47	11050706-3	58	U	37.9	mg/Kg	65.3	75	125			N
L52094-01MSD	MSD	08/04/05 2:59	11050706-3	58	U	38.6	mg/Kg	66.6	75	125	1.83	20	M
Solids, Percent			CLPSOW	390, PAF	RT F, D-98								
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG192448													
WG192448PBS	PBS	07/11/05 20:00				.14	%		99.9	100.1			
							,,						

Project ID:

Uranium (1312)			M6020 IC										
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193188													
WG193188ICV	ICV	07/26/05 21:49	MS050510-2	.05		.05335	mg/L	106.7	90	110			
WG193188ICB	ICB	07/26/05 21:55				U	mg/L		-0.0003	0.0003			
WG192754PBS	PBS	07/27/05 1:07				U	mg/L		-0.0003	0.0003			
L52094-05MS	MS	07/27/05 1:27	MS050524-3	.025	.0065	.03047	mg/L	95.9	75	125			
L52094-05MSD	MSD	07/27/05 1:33	MS050524-3	.025	.0065	.03068	mg/L	96.7	75	125	0.69	20	
L52094-07DUP	DUP	07/27/05 2:00			.001	.00124	mg/L				21.4	20	RC
Uranium, total (3	3050)		M6020 IC	P-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193036													
WG193036ICV	ICV	07/22/05 23:49	MS050510-2	.05		.05452	mg/L	109	90	110			
WG193036ICB	ICB	07/22/05 23:55				U	mg/L		-0.0003	0.0003			
WG192639PBS	PBS	07/23/05 1:32				U	mg/Kg		-0.15	0.15			
L52094-02MS	MS	07/23/05 2:10	MS050624-5	2.675	477	2689.445		82708.2	75	125			M3
L52094-02MSD	MSD	07/23/05 2:16	MS050624-5	2.675	477	520.074	mg/Kg	1610.2	75	125	135.2	20	M3 RD
WG193245													
WG193245ICV	ICV	07/27/05 5:53	MS050510-2	.05		.05428	mg/L	108.6	90	110			
WG193245ICB	ICB	07/27/05 5:59				U	mg/L		-0.0003	0.0003			
WG192639PBS	PBS	07/27/05 6:23				U	mg/Kg		-0.15	0.15			
L52094-02MS	MS	07/27/05 6:47	MS041014-2	2.675	479	2699.08	mg/Kg	82993.6	75	125			M3
L52094-02MSD	MSD	07/27/05 6:52	MS041014-2	2.675	479	512.53	mg/Kg	1253.5	75	125	136.2	20	M3 RD
Vanadium (1312)		M6010B I	СР									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		1.9976	mg/L	99.9	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.005	0.005			
WG193473							Ü						
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.005	0.005			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	.093	.6045	mg/L	102.3	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	.093	.5984	mg/L	101.1	75	125	1.01	20	
L52094-07DUP	DUP	07/30/05 14:07			.007	.0066	mg/L				5.9	20	
Vanadium, total	(3050)		M6010B I	CP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.932	mg/L	96.6	90	110			
WG193753ICB	ICB	08/04/05 2:07	=	_		U	mg/L		-0.005	0.005			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-0.5	0.5			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	82.4		86.9	mg/Kg		61.6	103			
WG192639LCSSD	LCSSD		PCN22503	82.4		86.28	mg/Kg		61.6	103	0.7	20	
· · · · -								407.7					
L52094-01MS	MS	08/04/05 2:47	11050706-3	58	15.8	78.27	mg/Kg	107.7	75	125			
L52094-01MS L52094-01MSD	MS MSD	08/04/05 2:47 08/04/05 2:59	11050706-3	58 58	15.8 15.8	78.27 79.56	mg/Kg mg/Kg	107.7 109.9	75 75	125 125	1.63	20	

Inorganic QC Summary

Western Water and Land, Inc.

Project ID:

Zinc (1312)			M6010B I	CP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193444													
WG193444ICV	ICV	07/30/05 11:47	11050720-1	2		2.006	mg/L	100.3	90	110			
WG193444ICB	ICB	07/30/05 11:50				U	mg/L		-0.01	0.01			
WG193473													
WG192754PBS	PBS	07/30/05 13:47				U	mg/L		-0.01	0.01			
L52094-05MS2	MS	07/30/05 13:57	11050712-2	.5	U	.53	mg/L	106	75	125			
L52094-05MSD2	MSD	07/30/05 14:00	11050712-2	.5	U	.52	mg/L	104	75	125	1.9	20	
L52094-07DUP	DUP	07/30/05 14:07			U	.0071	mg/L				0	20	
Zinc, total (3050))		M6010B I	СР									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG193753													
WG193753ICV	ICV	08/04/05 2:03	11050720-1	2		1.953	mg/L	97.7	90	110			
WG193753ICB	ICB	08/04/05 2:07				U	mg/L		-0.01	0.01			
WG192639PBS	PBS	08/04/05 2:23				U	mg/Kg		-1	1			
WG192639LCSS	LCSS	08/04/05 2:27	PCN22503	296		304.6	mg/Kg		235	357			
WG192639LCSSD	LCSSD	08/04/05 2:31	PCN22503	296		310.7	mg/Kg		235	357	2	20	
L52094-01MS	MS	08/04/05 2:47	11050706-3	58	31	85.5	mg/Kg	94	75	125			
L52094-01MSD	MSD	08/04/05 2:59	11050706-3	58	31	87.1	mg/Kg	96.7	75	125	1.85	20	

Western Water and Land, Inc.

ACZ Project ID:	L52094
DESCRIPTION	

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-01	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193036	Uranium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-02	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-03	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

ACZ Project ID: L52094

the control limit, which is attributable to the non-

ZG The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

homogeneity of the sample.

Western Water and Land, Inc.

					•
ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-04	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded

M6010B ICP

WG193753 Vanadium, total (3050)

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-05	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193671	Iron (1312)	M6010B ICP	RA	Relative Percent Difference (RPD) exceeded limit; sample concentration is less than 10x the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193473	Manganese (1312)	M6010B ICP	RA	Relative Percent Difference (RPD) exceeded limit; sample concentration is less than 10x the MDL.
	WG193753	Manganese, total (3050)	M6010B ICP	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193062	Mercury (1312)	M7470A CVAA	H3	Sample was received and analyzed past holding time.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193188	Uranium (1312)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG192754	Synthetic Precip. Leaching Procedure	M1312	H3	Sample was received and analyzed past holding time.

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-06	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-07	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193671	Iron (1312)	M6010B ICP	RA	Relative Percent Difference (RPD) exceeded limit; sample concentration is less than 10x the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193473	Manganese (1312)	M6010B ICP	RA	Relative Percent Difference (RPD) exceeded limit; sample concentration is less than 10x the MDL.
	WG193753	Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193062	Mercury (1312)	M7470A CVAA	H3	Sample was received and analyzed past holding time.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193188	Uranium (1312)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193036	Uranium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG192754	Synthetic Precip. Leaching Procedure	M1312	H3	Sample was received and analyzed past holding time.

Western Water and Land, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-08	WG193036	Antimony, total (3050)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Arsenic, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
		Cadmium, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not evaluated because the sample concentration was less than 100 times the MDL.
	WG193753	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193807	Iron, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6010B ICP	ZK	Target analyte detected in the blank as a negative result at or above the negative method limit (i.e. high negative bias). Sample concentration is at a minimum ten times greater than positive method reporting limit.
	WG193753	Lead, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
		Manganese, total (3050)	M6010B ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193257	Mercury, total	M7471A CVAA	H3	Sample was received and analyzed past holding time.
	WG193753	Nickel, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.
	WG193036	Selenium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193753	Silver, total (3050)	M6010B ICP	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG193245	Uranium, total (3050)	M6020 ICP-MS	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
			M6020 ICP-MS	RD	For a solid matrix, the spike/spike duplicate RPD exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG193753	Vanadium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not evaluated because the sample concentration was less than 50 times the MDL.

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: UP-BKG

Locator:

ACZ Sample ID: **L52094-01**

Date Sampled: 05/06/05 11:15

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:04	07/14/05 10:05	6.2	1.6	0.7	pCi/g	*	dbs
Gross Beta	07/22/05 0:04	07/14/05 10:05	6.7	1	1	pCi/q	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:24	07/14/05 10:05	1.6	0.5	0.9	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:10	07/14/05 10:05	1.7	1.7	4.4	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:00	07/14/05 10:05	0.4	0.28	0.29	pCi/g	*	dbs
Thorium 230	07/25/05 15:00	07/14/05 10:05	0.77	0.58	0.76	pCi/g	*	dbs
Thorium 232	07/25/05 15:00	07/14/05 10:05	0.6	0.51	0.29	pCi/a	*	dbs

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-01

Locator:

ACZ Sample ID: **L52094-02**

Date Sampled: 05/06/05 13:15

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:05	07/14/05 11:10	940	17	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:05	07/14/05 11:10	430	6	0.9	pCi/g	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:26	07/14/05 11:10	320	5.6	0.9	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:12	07/14/05 11:10	2.9	1.5	3.6	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:02	07/14/05 11:10	0.62	0.29	0.26	pCi/g	*	dbs
Thorium 230	07/25/05 15:02	07/14/05 11:10	230	5.5	0.67	pCi/g	*	dbs
Thorium 232	07/25/05 15:02	07/14/05 11:10	0.8	0.49	0.26	pCi/a	*	dbs

Western Water and Land, Inc.

Project ID:

Sample ID: DUP

Locator:

ACZ Sample ID: **L52094-03**

Date Sampled: 05/06/05 0:00

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

LLD	Units	XQ	Analyst

Prep Method: M3050B ICP

Parameter	Measure Date	Frep Date	Result	EIIOI	LLU	UIIILS	ΛQ	Allalyst
Gross Alpha	07/22/05 0:07	07/14/05 12:16	820	16	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:07	07/14/05 12:16	340	5.4	0.9	pCi/g	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:27	07/14/05 12:16	78	1.9	0.4	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:13	07/14/05 12:16	3.3	1.4	3.5	nCi/a		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:03	07/14/05 12:16	0.69	0.28	0.34	pCi/g	*	dbs
Thorium 230	07/25/05 15:03	07/14/05 12:16	160	5.3	0.88	pCi/g	*	dbs
Thorium 232	07/25/05 15:03	07/14/05 12:16	1.27	0.67	0.34	pCi/a	*	dbs

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-02

Locator:

ACZ Sample ID: **L52094-04**

Date Sampled: 05/06/05 13:50

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:08	07/14/05 12:49	200	7.9	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:08	07/14/05 12:49	82	2.7	1	pCi/a	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:29	07/14/05 12:49	54	2.6	1.1	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:15	07/14/05 12:49	2.3	1.2	3.4	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:05	07/14/05 12:49	0.5	0.27	0.31	pCi/g	*	dbs
Thorium 230	07/25/05 15:05	07/14/05 12:49	56	3	0.82	pCi/g	*	dbs
Thorium 232	07/25/05 15:05	07/14/05 12:49	0.68	0.56	0.31	pCi/a	*	dbs

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BFLY-03

Locator:

ACZ Sample ID: **L52094-05**

Date Sampled: 05/06/05 14:10

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:10	07/14/05 13:21	290	9.7	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:10	07/14/05 13:21	130	3.3	0.9	pCi/g	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:30	07/14/05 13:21	66	2.6	0.9	pCi/g	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:16	07/14/05 13:21	2.7	1.3	3.4	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:06	07/14/05 13:21	0.19	0.24	0.28	pCi/g	*	dbs
Thorium 230	07/25/05 15:06	07/14/05 13:21	84	3.5	0.74	pCi/g	*	dbs
Thorium 232	07/25/05 15:06	07/14/05 13:21	0.45	0.48	0.28	pCi/a	*	dbs

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-1

Locator:

ACZ Sample ID: **L52094-06**

Date Sampled: 05/06/05 16:50

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:11	07/14/05 13:54	520	12	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:11	07/14/05 13:54	230	4.4	0.9	pCi/a	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:32	07/14/05 13:54	130	4	1.1	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:18	07/14/05 13:54	3	1.3	3.3	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:08	07/14/05 13:54	0.46	0.28	0.2	pCi/g	*	dbs
Thorium 230	07/25/05 15:08	07/14/05 13:54	160	4	0.52	pCi/g	*	dbs
Thorium 232	07/25/05 15:08	07/14/05 13:54	0.82	0.41	0.2	pCi/a	*	dbs

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-2

Locator:

ACZ Sample ID: **L52094-07**

Date Sampled: 05/06/05 17:50

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:12	07/14/05 14:27	47	3.5	0.5	pCi/g	*	dbs
Gross Beta	07/22/05 0:12	07/14/05 14:27	18	1.4	0.9	pCi/a	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:33	07/14/05 14:27	13	1.2	0.9	pCi/q	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:19	07/14/05 14:27	4.1	1.5	3.5	pCi/g		msh

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:09	07/14/05 14:27	0.34	0.27	0.21	pCi/g	*	dbs
Thorium 230	07/25/05 15:09	07/14/05 14:27	9.7	1.1	0.55	pCi/g	*	dbs
Thorium 232	07/25/05 15:09	07/14/05 14:27	0.51	0.39	0.21	pCi/a	*	dbs

RadioChemistry Analytical Results

Prep Method: M3050B ICP

Western Water and Land, Inc.

Project ID:

Sample ID: BUR-3

Locator:

ACZ Sample ID: **L52094-08**

Date Sampled: 05/06/05 18:10

Date Received: 07/07/05

Sample Matrix: Soil

Gross Alpha & Beta (3050) M9310

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Gross Alpha	07/22/05 0:14	07/14/05 15:00	470	12	0.6	pCi/g	*	dbs
Gross Beta	07/22/05 0:14	07/14/05 15:00	150	3.7	0.9	pCi/g	*	dbs

Radium 226 (3050) M9315 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 226 (3050)	07/25/05 12:34	07/14/05 15:00	100	3.3	0.9	pCi/a	*	dbs

Radium 228 (3050) M9320 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Radium 228 (3050)	07/28/05 14:20	07/14/05 15:00	3.7	1.4	3.5	pCi/g		msh

Thorium, Isotopic (3050) ESM 4506 Prep Method: M3050B ICP

Parameter	Measure Date	Prep Date	Result	Error	LLD	Units	XQ	Analyst
Thorium 228	07/25/05 15:10	07/14/05 15:00	0.47	0.27	0.27	pCi/g	*	dbs
Thorium 230	07/25/05 15:10	07/14/05 15:00	88	3.5	0.71	pCi/g	*	dbs
Thorium 232	07/25/05 15:10	07/14/05 15:00	0.43	0.46	0.27	pCi/q	*	dbs

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Report Header Explanations

Batch A distinct set of samples analyzed at a specific time

Error(+/-) Calculated sample specific uncertainty

Found Value of the QC Type of interest

Limit Upper limit for RPD, in %.

LCL Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD Calculated sample specific Lower Limit of Detection

PCN/SCN A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis

PQL Practical Quantitation Limit

QC True Value of the Control Sample or the amount added to the Spike

Rec Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)RER Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.

UCL Upper Control Limit, in % (except for LCSS, mg/Kg)

Sample Value of the Sample of interest

QC Sample Types

DUP Sample Duplicate MS/MSD Matrix Spike/Matrix Spike Duplicate

 LCSS
 Laboratory Control Sample - Soil
 PBS
 Prep Blank - Soil

 LCSW
 Laboratory Control Sample - Water
 PBW
 Prep Blank - Water

QC Sample Type Explanations

Blanks Verifies that there is no or minimal contamination in the prep method procedure.

Control Samples Verifies the accuracy of the method, including the prep procedure.

Duplicates Verifies the precision of the instrument and/or method.

Matrix Spikes Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H Analysis exceeded method hold time.

R Poor spike recovery accepted because the other spike in the set fell within the given limits.

T High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.

U No nuclides detected above the Lower Limit of Detection (LLD)

V High blank data accepted because sample concentration is 10 times higher than blank concentration

X QC is out of control. See Case Narrative.

Z Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method Prefix Reference

M EPA methodology, including those under SDWA, CWA, and RCRA

SM Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

D ASTM
RP DOE
ESM DOE/ESM

Comments

(1) Solid matrices are reported on a dry weight basis.

(2) Preparation method: "Method" indicates preparation defined in analytical method.

(3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.

Radiochemistry QC Summary

Western Water and Land, Inc.

ACZ Project ID: L52094

Project ID:

Alpha		N	<i>I</i> 19310								р	Ci/g			
ACZ ID	Туре	Analyzed PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG193094															
WG192642PBS	PBS	07/22/05					.72	0.58	0.5			1			
WG192642LCSS	LCSS	07/22/05 RC041201-1	16.21				14	1.3	0.24	86.4	68	106			
L52094-01DUP	DUP-RPD	07/22/05		6.2	1.6	0.66	7.7	1.7	0.69					20	
L52094-01DUP	DUP-RER	07/22/05		6.2	1.6	0.66	7.7	1.7	0.69				0.64	2	
	MS	07/22/05 RC041201-1	35.24	940	17	0.59	610	17	0.9	-936.4	43	142			M3
WG193025PBS	PBS	07/22/05					0	0.11	0.12			0.24			
Beta		N	Л9310								р	Ci/g			
ACZ ID	Туре	Analyzed PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG193094															
WG192642PBS	PBS	07/22/05					.38	1.2	1.7			3.4			
WG192642LCSS	LCSS	07/22/05 PCN22221	40.04				43	2.7	1.6	107.4	80	125			
L52094-01DUP	DUP-RER	07/22/05		6.7	0.99	0.98	5.8	0.98	1				0.65	2	
L52094-01DUP	DUP-RPD	07/22/05		6.7	0.99	0.98	5.8	0.98	1					20	
L52094-02MS	MS	07/22/05 PCN22221	43.52	430	6	0.89	250	6.4	1.7	-413.6	67	121			M3
WG193025PBS	PBS	07/22/05					.06	0.28	0.39			0.78			
Radium 226 (3050)	N	Л9315								р	Ci/g			
ACZ ID	Туре	Analyzed PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG193193															
WG192642PBS	PBS	07/25/05					0	0.22	0.77			1.54			
WG192642LCSS	LCSS	07/05/05 50050400 0										1.54			
L52094-01DUP		07/25/05 RC050402-3	23.92				25	1.6	0.94	104.5	67	147			
LUZUU4-U IDUI	DUP-RER	07/25/05 RC050402-3 07/25/05	23.92	1.6	0.48	0.94	25 2.2	1.6 0.54	0.94 0.92	104.5	67		0.83	2	
	DUP-RER DUP-RPD		23.92	1.6 1.6	0.48 0.48	0.94 0.94				104.5	67		0.83	2 20	
L52094-01DUP		07/25/05	50.88				2.2	0.54	0.92	-176.9	67 59		0.83		M3
L52094-01DUP L52094-02MS	DUP-RPD	07/25/05 07/25/05		1.6	0.48	0.94	2.2 2.2	0.54 0.54	0.92 0.92			147	0.83		M3
L52094-01DUP L52094-02MS	DUP-RPD MS PBS	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05		1.6 320	0.48	0.94	2.2 2.2 230	0.54 0.54 5.7	0.92 0.92 1.2		59	147	0.83		M3
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3	DUP-RPD MS PBS	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05	50.88	1.6 320	0.48 5.6	0.94	2.2 2.2 230	0.54 0.54 5.7	0.92 0.92 1.2		59 p	147 148 0.26 Ci/g	0.83		M3 Qual
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3	DUP-RPD MS PBS 3050)	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05	_{50.88} Л9320	1.6 320	0.48 5.6	0.94 0.85	2.2 2.2 230 .03	0.54 0.54 5.7 0.04	0.92 0.92 1.2 0.13	-176.9	59 p	147 148 0.26 Ci/g		20	
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3 ACZ ID WG193493	DUP-RPD MS PBS 3050)	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05	_{50.88} Л9320	1.6 320	0.48 5.6	0.94 0.85	2.2 2.2 230 .03	0.54 0.54 5.7 0.04	0.92 0.92 1.2 0.13	-176.9	59 p	147 148 0.26 Ci/g		20	
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3 ACZ ID WG193493 WG192642PBS	DUP-RPD MS PBS 3050)	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05	_{50.88} Л9320	1.6 320	0.48 5.6	0.94 0.85	2.2 2.2 230 .03	0.54 0.54 5.7 0.04	0.92 0.92 1.2 0.13	-176.9	59 p	147 148 0.26 Ci/g Upper		20	
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (: ACZ ID WG193493 WG192642PBS WG192642LCSS	DUP-RPD MS PBS 3050) Type	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05 Analyzed PCN/SCN	50.88 //9320 qc	1.6 320	0.48 5.6	0.94 0.85	2.2 2.2 230 .03	0.54 0.54 5.7 0.04 Error	0.92 0.92 1.2 0.13	-176.9 Rec	59 p	147 148 0.26 Ci/g Upper		20	
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3 ACZ ID WG193493 WG192642PBS WG192642LCSS L52094-01DUP	DUP-RPD MS PBS 3050) Type PBS LCSS	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05 M Analyzed PCN/SCN 07/28/05 07/28/05 RC040810-1	50.88 //9320 qc	1.6 320 Sample	0.48 5.6 Error	0.94 0.85	2.2 2.2 230 .03 Found	0.54 0.54 5.7 0.04 Error	0.92 0.92 1.2 0.13	-176.9 Rec	59 p	147 148 0.26 Ci/g Upper	RPD/RER	20	
L52094-01DUP L52094-02MS WG193023PBS Radium 228 (3 ACZ ID WG193493 WG192642PBS WG192642LCSS L52094-01DUP L52094-01DUP	DUP-RPD MS PBS 3050) Type PBS LCSS DUP-RER	07/25/05 07/25/05 07/25/05 RC050402-3 07/25/05 M Analyzed PCN/SCN 07/28/05 07/28/05 RC040810-1 07/28/05	50.88 //9320 qc	1.6 320 Sample	0.48 5.6 Error	0.94 0.85	2.2 2.2 230 .03 Found	0.54 0.54 5.7 0.04 Error 0.71 0.98 1.4	0.92 0.92 1.2 0.13	-176.9 Rec	59 p	147 148 0.26 Ci/g Upper	RPD/RER	Limit	

07/25/05

Radiochemistry QC Summary

Western Water and Land, Inc.

ACZ Project ID: L52094

0.98

Project ID:

WG193069PBS PBS

Thorium 230 ESM 4506					pCi/g											
ACZ ID	Туре	Analyzed PC	CN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG193272																
WG192642PBS	PBS	07/25/05						4	0.34	0.66			1.32			
WG192642LCSS	LCSS	07/25/05 RC0	041013-1	162.12				190	5.1	0.71	117.2	66	129			
L52094-01DUP	DUP-RER	07/25/05			0.77	0.58	0.76	1	0.51	0.6				0.3	2	
L52094-01DUP	DUP-RPD	07/25/05			0.77	0.58	0.76	1	0.51	0.6					20	
L52094-02MS	MS	07/25/05 RC0	041013-1	172.47	230	5.5	0.67	650	8.4	0.56	243.5	61	135			M1

.09 0.32 0.49

RadChem Extended
Qualifier Report

Western Water and Land, Inc.

ACZ Project ID: L52094

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-01	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-02	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-03	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-04	WG193094	Gross Alpha	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.

RadChem Extended Qualifier Report

Western Water and Land, Inc.

ACZ Project ID: L52094

	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52094-05	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-06	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-07	WG193094	Gross Alpha	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
L52094-08	WG193094	Gross Alpha	M9310	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
		Gross Beta	M9310	МЗ	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193193	Radium 226 (3050)	M9315	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG193272	Thorium 230	ESM 4506	M1	Matrix spike recovery was high, the method control sample recovery was acceptable.



Certification Qualifiers

Western Water and Land, Inc.

ACZ Project ID: L52094

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium, total (3050)

M6020 ICP-MS

Radiochemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Thorium, Isotopic (3050)

ESM 4506

Soil Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Solids, Percent

CLPSOW390, PART F, D-98



Sample Receipt

Western Water and Land, Inc.

ACZ Project ID:

L52094 7/7/2005

Date Received:

Date Printed: 7/7/2005

Received By:

Receipt Verification

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA
		Х
		Х
		Х
Χ		
Χ		
Χ		
Χ		
Χ		
Χ		
		Х
		Х
		Х
		Х

Exceptions: If you answered no to any of the above questions, please describe

SXS ABOVE BKGROUND.

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1148	23.5	60

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

SXS ABOVE BKGROUND

Sample Receipt

Western Water and Land, Inc.

ACZ Project ID: Date Received: L52094 7/7/2005

Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	Y < 2	YG< 2	B < 2	BG< 2	0 < 2	T >12	P >12	N/A	RAD
L52094-01	UP-BKG										Χ	
L52094-02	BFLY-01										Х	
L52094-03	DUP										Χ	
L52094-04	BFLY-02										Χ	
L52094-05	BFLY-03										Х	
L52094-06	BUR-1										Χ	
L52094-07	BUR-2										Χ	
L52094-08	BUR-3										Х	

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
В	Filtered/Sulfuric	BLUE	pH must be < 2
BG	Filtered/Sulfuric	BLUE GLASS	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
0	Raw/Sulfuric	ORANGE	pH must be < 2
Р	Raw/NaOH	PURPLE	pH must be > 12
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Υ	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 μ R/hr

L52099

CHAIN of

CUSTODY 2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493 Report to: Address: 743 Hoesen CT Suite 330 Name: BILL MERRILL Company: NAK GRAND JUNCTION, CO 81506 Telephone: (970) 242-0170 E-mail: BILL. WWL & BRESHAD. NET Copy of Report to: E-mail: Name: Company: Telephone: Invoice to: Name: Address: Same Company: E-mail: Telephone: PROJECT INFORMATION ANALYSES REQUESTED (attach list or use quote number) Quote #: ひららてひし ひとをほれん Project/PO #: of Containers Shipping Co.: Tracking #: Reporting State for compliance testing: SAMPLE IDENTIFICATION DATE:TIME Matrix UP-BK6 <u>S</u> asmam, 5-6-05: 1115 Qu 27E TNBLE H 5-6-65-1315 11 11 ** BFLY-01 حى 5-6-05 ** ** 11 50 ٨ マシク ** " BFLY-02 5-6-05, 1350 20 BFW-03 5-6-05: 1410 50 # T4B1E 5 CATTACHED 270 Qu 5-6-05:1650 BUR-1 50 ١ ч TABLE CATACHED ZUS AT 5 5-6-05: 1750 20 D76 BUR-2 CAM A CHED TABLE ч BUR-3 5-6-05-1810 حح S CATTACHED 370 SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify) Matrix REMARKS

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	PAGE
12) - 12 July	7.7-05.1040	Henry Janoh	7/07/05 10:4	6
/	,	ARPI	7/3 1400	Of
			1	1

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493



Bill Merrill

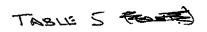
Western Water and Land, Inc. 743 Horizon Ct. Suite 330 Grand Junction, CO 81506 Page 3 of 7 9/14/2004

Quote Number: TABLE-4

Ma	tri	x:	Soil

Table 4: Soil/rock ~4 samples

watrix: Soil	Table 4. Solinock ~4 samples		
Parametor :	: Method	Detection Limit	Rostricample?
Metals Analysis			
Antimony, total (3050)	M6020 ICP-MS	0.02 mg/Kg	\$14.40
Arsenic, total (3050)	M6020 ICP-MS	0.05 mg/Kg	\$14.40
Cadmium, total (3050)	M6020 ICP-MS	0.01 mg/Kg	\$14.40
Chromium, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Copper, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Iron, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Lead, total (3050)	M6010B ICP	4 mg/Kg	\$7.20
Manganese, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Mercury, total	M7471A CVAA	0.02 mg/Kg	\$14.40
Molybdenum, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Nickel, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Selenium, total (3050)	M6020 ICP-MS	0.1 mg/Kg	\$14.40
Silver, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Uranium, total (3050)	M6020 ICP-MS	0.005 mg/Kg	\$14.40
Vanadium, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Zinc, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Misc.			
Diskette Preparation and Delive	ery		\$0.00
Quality Control Summary			\$0.00
Radiochemistry			
Gross Alpha & Beta	M9310	1 to 3 pCi/g	\$35.20
Radium 226 (3050)	M9315	1 pCi/g	\$56.40
Radium 228 (3050)	M9320	1.5 pCi/g	\$82.00
Thorium, Isotopic (3050)	ESM 4506	0.2 pCi/g	\$62.00
Soil Preparation			
Air Dry at 34 Degrees C	USDA No. 1, 1972		\$3.20
Digestion - Hot Plate	M3050B ICP		\$10.40
Digestion - Hot Plate	M3050B for Rad Chem		\$10.40
Digestion - Hot Plate	M3050B ICP-MS		\$10.40
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2		\$5.60
		Cost/Sample	\$434.00



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493



Bill Merrill

Western Water and Land, Inc. 743 Horizon Ct. Suite 330 Grand Junction, CO 81506 Page 4 of 7 9/14/2004

Quote Number: TABLE-5

Matrix: Soil

Table 5: Soil/rock ~5 samples

	t mate of controls of cumpies		
Parameter .	Method	Detection Limit	Cost/Sample
Metals Analysis			
Antimony (1312)	M6020 ICP-MS	0.0002 mg/L	\$14.40
Antimony, total (3050)	M6020 ICP-MS	0.02 mg/Kg	\$14.40
Arsenic (1312)	M6020 ICP-MS	0.0005 mg/L	\$14.40
Arsenic, total (3050)	M6020 ICP-MS	0.05 mg/Kg	\$14.40
Cadmium (1312)	M6020 ICP-MS	0.0001 mg/L	\$14.40
Cadmium, total (3050)	M6020 ICP-MS	0.01 mg/Kg	\$14.40
Chromium (1312)	M6010B ICP	0.01 mg/L	\$7.20
Chromium, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Copper (1312)	M6010B ICP	0.01 mg/L	\$7.20
Copper, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Iron (1312)	M6010B ICP	0.01 mg/L	\$7.20
Iron, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Lead (1312)	M6010B ICP	0.04 mg/L	\$7.20
Lead, total (3050)	M6010B ICP	4 mg/Kg	\$7.20
Manganese (1312)	M6010B ICP	0.005 mg/L	\$7.20
Manganese, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Mercury (1312)	M7470 CVAA	0.0002 mg/L	\$14.40
Mercury, total	M7471A CVAA	0.02 mg/Kg	\$14.40
Molybdenum (1312)	M6010B ICP	0.01 mg/L	\$7.20
Molybdenum, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Nickel (1312)	M6010B ICP	0.01 mg/L	\$7.20
Nickel, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Selenium (1312)	M6020 ICP-MS	0.001 mg/L	\$14.40
Selenium, total (3050)	M6020 ICP-MS	0.1 mg/Kg	\$14.40
Silver (1312)	M6020 ICP-MS	0.00005 mg/L	\$14.40
Silver, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Uranium (1312)	M6020 ICP-MS	0.00005 mg/L	\$14.40
Uranium, total (3050)	M6020 ICP-MS	0.005 mg/Kg	\$14.40
Vanadium (1312)	M6010B ICP	0.005 mg/L	\$7.20
Vanadium, total (3050)	M6010B ICP	0.5 mg/Kg	\$7.20
Zinc (1312)	M6010B ICP	0.01 mg/L	\$7.20
Zinc, total (3050)	M6010B ICP	1 mg/Kg	\$7.20
Misc.			
Diskette Preparation and Delive	ery		\$0.00
Quality Control Summary	•		\$0.00
·			\$5.00

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493



Bill Merrill

Western Water and Land, Inc. 743 Horizon Ct. Suite 330 Grand Junction, CO 81506 Page 5 of 7 9/14/2004

Radiochemistry			
Gross Alpha & Beta	M9310	1 to 3 pCi/g	\$35.20
Radium 226 (3050)	M9315	1 pCi/g	\$56.40
Radium 228 (3050)	M9320	1.5 pCi/g	\$82.00
Thorium, Isotopic (3050)	ESM 4506	0.2 pCi/g	\$62.00
Soil Preparation			
Air Dry at 34 Degrees C	USDA No. 1, 1972		\$3.20
Digestion - Hot Plate	M3050B ICP		\$10.40
Digestion - Hot Plate	M3050B for Rad Chem		\$10.40
Digestion - Hot Plate	M3050B ICP-MS		\$10.40
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2		\$5.60
Synthetic Precip. Leaching Pre	ocedu M1312		\$54.40
		Cost/Sample	\$654.00